State of California
Business, Transportation & Housing Agency
Department of Transportation

POLICY MATTERS
Lake Tahoe Area Issues
Information Item

Prepared By:
Irene T. Itamura
District 3 Director
(530) 741-4233

CTC Meeting: January 17-18, 2001

Agenda Item: 4.10

Original Signed By
W. J. EVANS, Deputy Director
Finance
January 5, 2001

REPORT ON TEN-YEAR OPERATIONS, MAINTENANCE AND REHABILITATION COSTS FOR WATER QUALITY BEST MANAGEMENT PRACTICES IN THE LAKE TAHOE BASIN

Issue:

During the July 19-20, 2000 meeting of the California Transportation Commission, Caltrans-District 3 was asked to report back to the CTC on the estimated maintenance and rehabilitation costs for servicing the Water Quality Best Management Practices (BMPs) planned for use in the Lake Tahoe Basin. Information on O&M costs for state-of-the-art BMPs is limited at this time. However, using some broad assumptions, an estimate of the 10-year Operation, Maintenance, and Rehabilitation costs for a range of BMPs is being provided at this time.

Background:

Scientists are pointing to nutrients carried by fine sediments in untreated stormwater flows as the principle cause of loss of clarity of Lake Tahoe. The Basin's Environmental Improvement Program (EIP) and Caltrans' statewide Stormwater Discharge Permit require retrofitting all state highways in the Basin to meet very stringent "numeric effluent standards" by 2008. Through a combination of erosion control work and the installation of stormwater collection, treatment and conveyance facilities it is anticipated that any contamination from the state highways will become insignificant. Along with Caltrans, these same requirements are being applied to all other public and private areas of the Basin, with the expectation of arresting and reversing the decline in clarity of the Lake.

With the commitment to retrofit comes the obligation to properly operate, maintain and rehabilitate the BMPs. The Commission has requested information regarding estimates of the 10-year costs to operate and maintain the BMPs at build-out.

Summary and Conclusions:

A Powerpoint presentation covering this item will be made at the meeting.

The estimated costs associated with two alternatives, Infiltration basins plus Traction Sand Trap Devices vs Water Treatment Plants in Urban areas are presented as follows.

Treatment Option	Capital Cost (Excludes Right of Way)	10-Year O&M Cost
Infiltration/Detention Basins & Traction Sand Traps:	$20,900,000	$11,500,000
Water Treatment Plants for Urban Areas Including Storm Drain Collection System, Basins and Sand Traps for Rural Areas:	$37,650,000	$22,200,000

Additionally, questions of BMP feasibility, life cycle costs, and effectiveness in meeting the Numeric Effluent Limits for the Lake Tahoe Basin are currently the subject of a two-year study being conducted by Caltrans in partnership with the other stakeholders in the Basin.